HOLDEN FORESTS & GARDENS

Annual Report

"Now that the Holden Arboretum and Cleveland Botanical Garden have joined forces, opportunities have emerged for Holden Forests & Gardens to have an even greater impact on the region. With expertise in horticulture, conservation, environmental research and education, we are a valuable asset to the community."

— Jill Koski, President and CEO



Table of Contents

Reforesting the Forest City
By the Numbers
Planned Giving: Albert Fairchild Holden Society & Perennial Society 6
Institutional Giving
From Farm to Table in Cleveland's Eastside Neighborhoods
Gifts in Honor and Memory
Scientists Seek Answers in the Living Laboratories of Holden Forests & Gardens 14
Affiliate Donors
High School Students to Explore Careers in Forestry, Arboriculture and Conservation
Individual Giving
Holden Forests & Gardens Financial Report 22
Leadership Team
Volunteers



Reforesting the Forest City

Since the 1950s, Cleveland has lost about half of the tree canopy that once gave the community its "Forest City" nickname. In 2017, ambitious plans were announced to increase the tree canopy cover from 19 percent to 30 percent by 2040, with the long-term goal of reaching a 40 percent canopy in the city.

Planting new trees is not just about aesthetics. Cleveland's trees intercept 1.8 billion gallons of rainwater and remove 830,000 pounds of air pollution each year. Combined with the impact on heating and cooling costs, increased property values and contributions to the improved health of area residents, the current tree canopy provides Cleveland with more than \$28 million in benefits each year. That dollar figure will increase along with tree canopy.

A key leader in this effort, Holden Forests & Gardens (HF&G) is supporting the reforestation efforts in a number of ways. Sandra Albro, an HF&G researcher, is serving as one of the co-chairs of the Cleveland Tree Coalition, which is advocating for the planting of 50,000 trees in Cleveland by 2020. In support of that effort HF&G community forestry staff planted 694 trees in the City of Cleveland in 2017. Planting new trees is only the first step to ensuring a healthy tree canopy in the city. Once planted, trees need care to ensure that they survive and thrive. To assist in that effort, HF&G is partnering with the Wester Reserve Land Conservancy to provide Sherwick Tree Steward Training. During the training citizens learn how to plant, care for and maintain trees, which is critical to the success of the Cleveland Tree Plan. In 2017, 91 new tree stewards were trained through this program.

2017 BY THE NUMBERS

Annual Visitors: 388,888 **Annual Visitors: 388,888** 187,066 @ Cleveland Botanical Garden 201,822 @ Holden Arboretum

New Trees Planted in the Community: 694





Planned Giving

PERENNIAL SOCIETY

We sincerely appreciate the following members for investing in the Botanical Garden's future through bequests, annuities and other planned gift arrangements:

Anonymous (6) Anne F. Barnes Teresa Metcalf Beasley Lon A. Beck Barbara Becker Dorothy A. Berlincourt Jeffrey M. Biggar Elizabeth Billings Patricia D. Bonander Pat Brady Baron Mary A. and Robert E. Cogan Mary F. and William E. Conway Janet S. Curry Judy A. Dorer Marjorie M. Drollinger Ruth S. Eppig Jeanette P. Evans Lynne R. and John T. Feighan Mary F. Ganger Donna T. and Harry Gazelle, M.D. Margaret Ann Gudbranson Carmela Guerrero Debra Hershey Guren and Peter Guren Nancy L. and Charles G. Gustafson Marie Louise Gustavsson-Monago Beverly S. Harris Arlene Monroe Holden Christa L. Just Charlotte R. Kramer Rose M. Kubik Barbara E. Kuby Carolyn C. Lampl

Stephen G. Lorton Margaret B. Marting Elizabeth F. McBride Robert L. Moncrief Ruth E. and J. Donald Moorhead Donald W. Morrison Anthony and Rita Nassif Patricia A. and Ernest J. Novak, Jr. Pamela Jacobson Oliva Nancy Patrick Terry L. Pekarek Clara T. Rankin June M. Russell Elisabeth P. Scheele Barbara B. Scovil Clara DeMallie Sherwin Harriet T. Simon Deborah A. Smith Ruth M. and Thomas G. Stafford Lois C. and Thomas G. Stauffer Theresia V. and Arthur P. Steinmetz M. Jane Suresky Joanna Thomas M. Jane Toth William and Judith Ann Tucholsky Dorothy Ann Turick J. Paxton Van Sweringen Clare R. Walker Doris H. and Russell J. Warren Lucy Ireland Weller M. Conrad White Marilyn M. Wilde

THE ALBERT FAIRCHILD HOLDEN SOCIETY

We sincerely appreciate the following members for investing in the Holden Arboretum's future through bequests, annuities and other planned gift arrangements:

Anonymous (4) Ian J. Adams David W. Albrecht **Geraldine Atkins** John Burke and Leslie A. Baeuerlen **Richard and Susan Beck** Doug and Lynne Bekkedahl Peter and Sally Bergsten Marlene S. Campbell George Crile III David L. Daggett C. B. Esselstyn, Jr. Kenneth and Ann Felderman Mildred Fiening Dorothy Flagor J. Lynn and Joellen Fordham Mimi Gale Shirley W. Gibson Sharon and David Graper Judith F. Gruber Maria Johanna Hall Susan Hanna Henry and Robin Hatch Annie T. Hitchcock Mary V. Hoffman Arlene M. Holden John M. Hoyes Fred and Arlyne Imm Katharine Jeffery and Alan Farrand Curt and Norma Jerauld Richard J. Kabat

Edward and Linda Karolak Rose M. Kubik Maureen E. Landies Louise Lister Bruce A. Loomis Robert and Carol Love Linda C. Luck Ann H. McConnell William B. McCoy Peter A. McCoy Elizabeth H. McMillan S. Sterling and Judith McMillan Joseph H. Miller, Jr. Dorothy H. Moyse Maynard Neal Edward Nedved Thomas W. Offutt III C. W. Eliot and Linda Paine Ella Quintrell Karen L. Roberts George M. Rose Mary Ann Sheranko Leila R. Shiozawa Roberta K. Spurgeon John Steichen Lorraine S. Szabo John and Susan Turben Ms. Marilyn J. White Mrs. Robert Y. White Irene M. Yeran Milford M. Adams Margaret M. Aicher Janet Aitken



IN MEMORIUM

We honor these Perennial Society and Albert Fairchild Holden Society members whose foresight has left a legacy of continuing support for Holden Forests & Gardens:

Virginia Albrecht Lillian C. Alten Elizabeth and Raymond Q. Armington Louise Bliss Armington Phrocine R. Bailey Dorothy L. Barry Norma E. Battes Wilma S. Bemis Don A. Berlincourt Kate and Warren Bicknell, Jr. Virginia R. Billinghurst Anna B. and Alfred C. Body Klara Bozler and Emil Bozler, Ph.D Frances K. Bradner Betty Dunbar Brien Jane Brooke Pauline S. Bruner Carol J. Burley Carol H. Butler Elizabeth N. Chamberlain J. T. Jarod Clark Catherine E. and James P. Conway Warren and Maud Corning Joan R. Coulter William S. Cumming, M.D Martha M. and George F. Dalton III Jeanne R. Daus Margie K. Davis Lauretta M. Dennis, D.V.M Dorothy E. Ebersbach Robert and Mary Farrell Marvin Feldstein John R. Gardner William H. Gerhauser Anita Peek Gilger, M.D. Gladys B. Goetz Leonard C. Gradeck William and Betty Green Cora E. Haake Maria Johanna Hall Margaret L. Hammond Barbara Hitchcock Hatch Nellie S. Hawgood Eva Tilton Hays Laura R. Heath Eleanor I. Hegele Martha E. Hickox Ortrud Higgins

Sarah Cole Hirsh and Willard Hirsh Helen C. Hitchcock Albert Fairchild Holden Claire D. Holden Joseph and Hazel Hostetler Virginia L. Jones Frances Judnick Louis D. Kacalieff, M.D. Muriel M. Kozlow Thomas E. Kuby Marjorie M. and Samuel H. Lamport David G. Leach Elinor M. LeCastre **Eleanor Manbeck** Irene E. Manni Winfried and Liselotte Martin Thomas W. Mastin Jean and Robert E. Mathews II Marguerite H. McGrath Estate of Marjorie Bos Meacham Alice Mecredy Lester T. Miller Aurel Ostendorf Silvia Balslew Page Gretta and Hugh D. Pallister, Jr. Charlotte L. and Kenneth R. Parker Jeanne E. Phare Robbie Pile Mary M. Pitonyak Harriette McCann Roudebush R. Phillip Russell Karl and Owlen Schubert Samuel K. Scovil II Ruth P. Sears Fave Shapero Thelma and Daniel J. Shapiro, M.D Lee Shiozawa David L. Simon Leonard and Jean Skeggs **Eleanor Armstrong Smith** Mary Rose Clayton Smith Katherine B. Spring Eleanor and Andrew Squire Sarah A. Stark Harrison Stine Faith Swanson Richard E. Szorady Josephine A. and Nelson S. Talbott



Louise H. Taylor Elizabeth Marting Treuhaft Bruce Umstead Barbara Van Sweringen Esther Voorhees Cynthia K. Walker Emma Raymond White Robert York White John and Atheline Wilbur Alan H. Wilde, M.D. Frances Elizabeth Lambright Wilkinson Elizabeth M. Williamson Theodore Yocom Norman W. Zaworski, M.D.

Institutional Giving



\$100,000 and above

American Foundation The Cleveland Foundation The Corning Institute for Education & Research Cuyahoga Arts and Culture The Holden Arboretum Trust The Kelvin and Eleanor Smith Foundation The Kent H. Smith Charitable Trust The Louise H. & David S. Ingalls Foundation Paul and Maxine Frohring Foundation, Inc.

\$50,000 - \$99,999

Great Lakes Protection Fund Raymond Q. & Elizabeth Rieley Armington Fund No. 2 SandFair Foundation

\$25,000 - \$49,999

Arthur and Arlene Holden Fund of The Cleveland Foundation Charles Stewart Mott Foundation Green Family Trust Gries Family Foundation The Hershey Foundation Holden Parks Trust John P. Murphy Foundation KeyBank Foundation Saint Luke's Foundation The Sally and Larry Sears Fund Stewart and Donna Kohl Fund Third Federal Foundation The Veale Foundation

\$10,000 - \$24,999

Alton W. Whitehouse Charitable Lead Annuity Trust Charles and April Walton Charitable Fund City of Cleveland - Department of Community Development Daisy Foundation of the Fidelity Charitable Gift Fund Fairmount Santrol Foundation George M. and Pamela S. Humphrey Fund Joseph P & Nancy F. **Keithley Foundation** Key Private Bank Lakeland Community College MIH Foundation The Murch Foundation NACCO Industries. Inc. The Norweb Foundation Robert R. and Gay C. **Cull Family Foundation** SCH Foundation Sears-Swetland Family Foundation The South Waite Foundation Spencer L. Murfey Family Foundation Weathertop Foundation

\$5,000 – \$9,999

The Adi and Celia Gazdar Charity Fund

Albert A. Hanes Charitable Gift Fund The Allayne and **Douglas Wick Foundation** Anonymous Arbor Day Foundation The Banks Baldwin Foundation Bessie Benner Metzenbaum Fund of The Cleveland Foundation Center for Plant Conservation, Inc. Cleveland Indians The Cleveland Wire Cloth & Mfg. Co. Component Repair Technologies The Davey Tree Expert Company **Dominion Foundation** The George W. Codrington Charitable Foundation G.W. Fredericks Mechanical LLC Heidelberg Distributing Co. Hieronymus Family Fund Inc. The Higley Fund Lake County Visitors Bureau Lake Health Leonard, Lillian, Faye, Albert B. & Audrey G. Ratner DAF Lincoln Electric Foundation Lois C. and Thomas G. Stauffer Charitable Trust The Lubrizol Foundation Maloney & Novotny LLC The O'Neill Brothers Foundation

Reginald and Lynn Shiverick Fund of The Cleveland Foundation Renaissance Charitable Foundation Inc. Sassafras Land Design Scholnick Family Foundation Susan and John Turben Foundation Tree Fund The Triple T Foundation Turner Family Fund

\$1,000 - \$4,999

ACJ Charitable Gift Fund Agmet, LLC AHG-RLI, LLC Alliance for Community Trees American Greetings Corporation Ann C. Rodewig Charitable Fund of Fidelity Charitable Arthur Holden Leadership Institute BakerHostetler Betty T. & David M. Schneider Foundation The Catherine L. & Edward A. Lozick Foundation Chefs for Hire Catering The Clara T. Rankin Charitable Fund **Cleveland Metroparks System** CM Wealth Advisors Cuffs Clothing Company The C. Walder Parke Family Foundation

The Cyrus Eaton Foundation D.E. & B.E. Mansperger Foundation David and Inez **Myers Foundation** Dealer Tire, LLC Duvin Family Philanthropic Fund Earthwalk Orthotics Eaton Corporation Edith and Ted Miller Philanthropic Fund **Eleanor and Andrew** Squire Trust Elizabeth Ring Mather and William Gwinn Mather Fund Elizabeth S. Morris **Giving Account** Emily Hall Tremaine Foundation The Ferry Family Foundation Fire Truck Pizza Co. FirstEnergy The Folio Club Forest City Tree **Protection Company** Frank H. and Nancy L. Porter Fund of The **Cleveland Foundation** Frantz Ward LLP Fred A Lennon Charitable Trust The Giant Eagle Foundation Gillmore Security Systems Glenmede Trust Company, NA Green Circle Growers The Hankins Foundation Hard Rock Rocksino Northfield Park Harold J. Belkin Foundation The Harry K. Fox and Emma R. Fox Charitable Foundation Helen Greene Perry-E Lee Perry Charitable Trust Home Savings Charitable Foundation Impel Creative, Inc. The Jack Family Charitable Fund Jack, Joseph, and Morton Mandel Philanthropic Fund Jackson Lewis P.C. Jane B.N. Brooke Trust The Jane G. Cunningham Foundation The Kendis Family Charitable Trust Kent State University Klotzman Philanthropic Fund of Jewish Federation of Cleveland Kolz Family Charitable Fund The Laub Foundation The Lubrizol Corporation

MCRYW Fund of the Fidelity Charitable Gift Fund Michael J. Horvitz Donor Advised Fund Midwest Cactus & Succulent Society Milton A. and Charlotte R. Kramer Charitable Foundation Morley Hitchcock Family Fund of The Cleveland Foundation Nola D. and Thora F. Weyrick Trust Nordson Corporation Foundation **O-I** Charities Foundation Ohio CAT Old Stone Church OSISoft, LLC **Oswald Companies** Owens-Illinois, Inc. The Peggy and John Garson Family Foundation The Perkins Charitable Foundation The Peter Hellman Family Fund P.K. Ranney Fund ParkOhio Holdings Corporation Peter Hellman Family Fund of Fidelity Charitable Gift Fund Phyllis H. & William H. Evans Charitable Foundation Plymouth Church of Shaker Heights, UCC PricewaterhouseCoopers LLP Primus Capital Partners, Inc. Pysht Fund **RIG III Family Foundation** The Robert S. Morrison Foundation SAGES-Case Western **Reserve University** Schwab Charitable Fund Serene G. Shaper Fund Shelly L. & Mark J. Saltzman Philanthropic Fund Siobhan and William Thompson Charitable Fund The S.K. Wellman Foundation St. Clair Advisors University Circle, Incorporated The Victoire G. and Alfred M. Rankin, Jr. Family Charitable Wells Fargo Advisors The Western Reserve Herb

The Martinez Firm







From Farm to Table in Cleveland's Eastside Neighborhoods

Green Corps, Holden Forests & Gardens urban agriculture work-study program, was created in 1996 to offer high school students the opportunity to learn job and leadership skills while earning a paycheck. Each year, students learn how to grow fresh produce, which is sold at area farmers markets and on-site farm stands. Green Corps students even maintain beds at Cleveland's Progressive Field, which produce fresh vegetables used to create meals for the Cleveland Indians and visiting teams.

In addition to learning new skills, Green Corps students are also enhancing life in the neighborhoods surrounding the farms. Green Corps farm stands have become fixtures in the neighborhoods, with 34 percent of Green Corps total sales taking place at the neighborhood farms in 2017. This is an increase from the 29 percent of total sales at the farm stands in 2016.

The success of the farm stands is due in part to partnerships that have been formed with other agencies, including Ohio's Food Assistance Program. Working with the state program allows members of the community to use the state's EBT card and Produce Perks to purchase food at the farm stands. Other programs designed to foster healthier eating habits, including the Produce Prescription, WIC and Senior Farmers Market programs, are also accepted at the stands. In 2017, these types of programs generated:

- 50 percent of the sales at the Fairfax farm stand
- 41 percent of sales at the Slavic Village farm stand
- 16 percent of the sales at the Midtown farm stand
- 22 percent of the sales at the Buckeye/Woodland farm stand
- 22 percent of sales at the Tremont Farmers Market
- 11 percent of sales at the Shaker Square Farmers Market

Top selling vegetables included peppers, tomatoes, kale, collards, eggplant, zucchini, onions, apples, broccoli, beets, swish chard and carrots. The result of these efforts is that fresh produce, grown locally by students who live in the community, is making its way into neighborhood kitchens and leading to healthier meals for area residents.

Gifts in Honor and Memory



We gratefully recognize the thoughtful contributions of individuals and organizations whose generous gifts honor or commemorate friends and family members during fiscal year 2017 (October 1, 2016 – September 30, 2017):

Anonymous

Mr. and Mrs. Thomas W. Adler Mr. and Mrs. Lawrence E. Apple Audubon Society of Greater Cleveland Paul and Marvann Barabani Ms. Christine Barabani Mr. Anthony E. Barabani Mr. and Mrs. Dale Barina Brian and Rebekah Barsch Ms. Deborah Becker Doug and Lynne Bekkedahl Mrs. Joanie Belair Mr. and Mrs. Timothy J. Bencic **Benevity Community** Impact Fund Mrs. Christine Bennett and Mr. Ryan Jamison Terry Bernstein and **Rick Bernstein** Ms. Kathleen Betz Mr. Geoffrey S. Biegel Ms. Phoebe Birming Ms. Sue Blazek Mr. and Mrs. Louis J. Bloomfield **Blossom Womens** Committee Northeast Ms. Dolores A. Ciccanesi and Mr. Bob Bompane Mr. David Bongorno **Bill and Nancy Brewer** Michael and Shirley Brizz Mr. William S. Brooks Mr. Winfield Brown Mrs. Lorna and Mr. Frank Buck Ronald and Mary Jo Burwinkel

Philip A. Burwinkel Thomas Burwinkel, MD Mr. Barry Campbell Mr. and Mrs. Peter A. Carfagna Helen Chicoine Mr. and Mrs. Henry Chisholm III Mr. and Mrs. John Clarry Daniel and Christine Collum Karen Cooper and Andrew Minton Mrs. Virginia Cousins Ms. Nancy M. Dechert Anne and Thomas Deetz Mr. and Mrs. Michael Dewees Mr. and Mrs. David S. Dickenson II Mr. and Mrs. Mike Dickoff Dr. and Mrs. Paul E. DiCorleto Mr. William M. Donley Mr. Paul Dougherty Mr. Sean Doyle Mrs. Kimberly Dunlap Ms. Carol A. Edkins Ms. Nan Eisenberg Fairmount Garden Club Family Health International Miss Maureen M. Feeney Mr. and Mrs. Randy Feldman Michael and Margaret Gerhardstein Mr. and Mrs. Jonathan Goodman Ms. Susan Gray Bé Mrs. Mary Green and Mr. Don E. Hissam Sarah and Robert Gries Fran and David Grossman Mrs. Laurence K. Groves

Mrs. Barbara Guav Mr. and Mrs. Tom Gunkel Mrs Anne K Gus Mrs. Melinda and Mr. David Halliburton Rob and San Hammond Mr. Edward Hansen Lawrence and Linda Hatch Mr. and Mrs. Henry R. Hatch Mr. Jonathon and Claire Herman Mr. and Mrs. John F. Herrick Lynn and Karl Hoekstra Ms. Sarah Hurt Katherine and James Inabinet John and Patricia Jenkins Ms. Deborah and Mr. Frank Jesensek Mr. and Mrs. Stephen M. Karaffn Audrey Katzman and Tim McParland Mr. and Mrs. Tom Kaung Ms. Michelle Kee Mrs. Vivian and Mr. Robert and Kellv Keelan Ms. Nora D. Kieser Mr. Albert F. Klavora Mr. and Mrs. Matthew D. Knecht Ms. Marcia R. Silver and Mr. Martin F. Kohn Mrs. Ralph M. Kovel Helene Krasney Mr. and Mrs. Steve Kravitz Mrs. Jean Lach Tom and Samie Lang Mr. David Lazor Mr. and Mrs. Frank N. Linsalata Ms. Deborah A. Litz Mr. and Mrs. David S. Loeffler John and Margaret Logar Ms. Jessica Ludy

Mr. and Mrs. Philip Luhmann Mr. and Mrs. Robert Lustig Mrs. Becky Mahaney Mr. and Mrs. Joseph Mahovlic Judith and Edward Majher Janet Mannino, Marie Hickey, Barbara Curran Miss Rachel Margulis Carol & Chris Martin & family and Alice & Marty Nyari Andrew and Allison Meinhold Mr. and Mrs. Arthur G. Merriman, Jr. Ms. Carol Miller and Ms. Patricia Rehm Mr. David Mitskavich Mr. and Mrs. Latham W. Murfey III Ms. Melinda Myer Barbara A Nader Carol and James Nemastil Mr. and Mrs. Ronald Neuger Mr. David C. Nilsen Ms. Lisa O'Brien Ellen O'Leary Ms. Loreen Fletcher Oiler Mr. and Mrs. Terrence Orvis Mr. David A. Osborne, Jr. Mr. and Mrs. C. W. Eliot Paine Ms. Marilyn D. Parker Mr. Dave and Mrs. Laura Passerallo Mr. James Pease Mr. Jim Penjak Ms. Donna Petersen Ms. June Poole Professor Andrea Rager and Mr. Matthew Rager Mr. Frederick and Mrs. Leigh Anna Reichenbach

Mr. Larry and Mrs. Marilyn Reichert Mr. and Mrs. Larry Reichert Jennifer and Joseph Restivo Ms. Vanilda Reyes de Noyes A. Brad and Ellen Richardson Mrs. Barbara Rosskamm Mr. and Mrs. Jim Ruttinger Cindy and Ernie Sackett **Richard and Ruth Schaeffer** Mrs. Laraine and Mr. John Schuster Mr. and Mrs. Harvey Schwartz Ms. Andrea Sharb Cleon and Judith Shutt, Jr. Ms. Deborah Siegel Mrs. Anne M. Skemp Darlene and Daniel Snell Catherine and Timothy Snelly Mrs. Carlynn Snyder Mrs. Constance Holden Somers Mrs. Karol Sprague Mr. Joe and Mrs. Marlane Sturm Ryan and Annelise Sullivan Ms. Amanda and

Ms. Leticia Taft-Pearman Tonne Tamerlano Mrs. Susan M. Taylor The Marla and Joseph Shafran Foundation Thomas Brick Company Andrea and Jim Thome Mrs. Kathy Torma Mrs. Louise Toutant **Richard Towne** Mr. and Mrs. W. Dean Trautman Ms. Christeen Tuttle Ms. Carole Usaj Jenny Wajciechowski Ms. Fay Walker Mrs. Marylou Wallenhorst Barbara and Richard Warren Dorothy R. Weckel and Jean A. Retzer Ms. Sharon J. Weeden Mrs. Hannah Weil Linda and Michael Wilson Thea and Peter Zimmerman Mrs. Donna Zoldak-Cook and Mr. Kevin Cook





Scientists Seek Answers in the Living Laboratories of Holden Forests & Gardens

In September 2017, Holden Forests & Gardens horticulturists planted 500 ash trees at the Ellen Corning Long and T. Dixon Long Center for Plant and Environmental Science in an effort to identify ash trees that are resistant to the emerald ash borer. The project, the latest resulting from an ongoing partnership with researchers from the U.S. Forest Service, will test if trees that survived the infestation of the invasive insect in places like Detroit, did so because they have some resistance to the insect. Trees identified as truly resistant can then be propagated for use in reforestation efforts.

The ash tree project is part of an ongoing effort by Holden Forests & Gardens scientists to find solutions to the threats faced by our native forests. An earlier collaboration with the U.S. Forest Service identified beech trees that showed resistance to beech bark disease, leading to the creation of a beech tree seed orchard that can be used for future reforestation efforts.

HF&G scientists and their partners are also looking at the best practices to follow for reforestation. A continuing project with the Cleveland Metroparks and Case Western Reserve University has transformed a former area golf course into a living lab to test reforestation methods. When the Cleveland Metroparks acquired the former Acacia Golf Course in Beachwood, Ohio, the goal was to convert the facility back into woodlands. The land's history as a golf course meant that great effort had been put into keeping the former fairways clear of trees. That maintenance, which would have included applications of fertilizers and pesticides, resulted in altered soil chemistry and microbial communities, which can have a negative effect on tree growth. The project offered researchers the opportunity to explore methods of restoring beneficial microbes to the soil and studying the effect those microbes have on plant growth. Over the next few years, HF&G, Metroparks and Case Western Reserve University scientists will monitor tree growth and performance to determine how soil microbes affect trees' establishment in urban, highly disturbed soils. The goal is to be able to refine best practices for forest restoration projects.

While these collaborations are just a part of the work being done by scientists at Holden Forests & Gardens, they demonstrate the power of collaborative partnerships within the research community. HF&G scientists, working in partnership with researchers at other institutions have a greater impact than they would on their own and opens Holden Forests & Gardens natural areas up to visiting researchers as a living lab for the study of ecological issues.

Affiliate Donors

We gratefully recognize the following affiliate organizations for their fiscal year 2017 (October 1, 2016 – September 30, 2017) financial contributions toward furthering the our mission:

\$1,000 and above

The Garden Club of Cleveland The Hudson Garden Club Midwest Cactus & Succulent Society The Western Reserve Herb Society

\$250 - \$999

Cat's Den Garden Club East Shore Garden Club Emerald Necklace Garden Club Fairmount Garden Club Greater Cleveland Orchid Society The Herb Guild Hilltop Garden Club Ikebana International, Cleveland Chapter #20 Lakewood Garden Club Ohara School of Ikebana, Northern Ohio Chapter Town and Country Garden Club of Cleveland Westlake Garden Club Wildwood Garden Club

\$100 - \$249

The Akron Garden Club Aquilegia Garden Club Avon-on-the-Lake Garden Club Bay Village Garden Club Beach Cliff Garden Club The Bedford Garden Club The Garden Club of Bentleyville Berea Garden Club Chippewa Garden Club **Cleveland Flower Arrangers Guild** Cleveland Rose Society The Gardeners of **Greater Cleveland** Concord Garden Club Dahlia Society of Ohio Fairview Park Garden Club Forest City Garden Club Fork and Hoe Garden Club Four Corners Garden Club GardenWalk Cleveland. a program of LANDStudio The Gates Mills Garden Club Highland Heights Garden Club Independence Garden Club Indoor Gardening Society of America

Lake Shore Garden Club The Little Gardens Club Lyndhurst Garden Club Mayfield Village Garden Club North Coast Gesneriad Club & African Violet Club North East Ohio Iris Society Northeast Ohio Daylily Society Northern Ohio Perennials Society Olmsted Falls Garden Club **Ridgewood Garden Club** of Parma Shaker Lakes Garden Club Terrace Garden Club Village Garden Club

NEW LEAF

Anonymous Allayne and Douglas Wick Foundation Richard and Susan Beck Mr. and Mrs. Jack Blackwell Mr. and Mrs. Benjamin P. Bole III Mr. and Mrs. Richard H. Bole Dr. Barbara Brown and Dr. Steven Ward Mr. and Mrs. Roger H. Cerne D.E. & B.E. Mansperger

Foundation Mr. and Mrs. David S. Dickenson II Fairmount Santrol Foundation Mrs. Betty A. Farenchak Sarah and Robert Gries Dr. Clement W. Hamilton and Karen A. Krager Bob Heath and Beth Buchanan Mr. and Mrs. Jeffrey Huntsberger Mr. and Mrs. Leslie W. Jacobs Mr. and Mrs. Walter E. Kalberer Ms. Nora D. Kieser Mrs. Margaret Ocepek Mr. and Mrs. C. W. Eliot Paine James and Barbara Pelowski, Ph.D. Phyllis H. & William H. Evans Charitable Foundation Mr. and Mrs. Thomas W. Seabright Mrs. Astri Seidenfeld





High School Students to Explore Careers in Forestry, Arboriculture and Conservation

High school students thinking about their future careers are being given the opportunity to explore career paths that lead away from the office and into nature. Forest Immersions XP was designed to help students explore potential careers in arboriculture, community forestry and conservation.

Supported with a grant from the Tree Fund of the Ohio Chapter of the International Society of Arboriculture and held in partnership with Red Oak Camp in Kirtland, the hands-on, overnight experience gives participants the chance to interact with plant care professionals, urban foresters and conservation biologists. The new program also gives the participants a chance to explore the forests of the Holden Arboretum and try out their tree climbing skills. Each student returns home with additional information on the educational pathways needed for these nature-based careers, as well as other career options in the field.



Individual Giving

\$100,000 and above

Gay and Edward Addicott Mr. and Mrs. Walter E. Kalberer Dr. Hossein Naraghipour Mr. and Mrs. C. W. Eliot Paine Mrs. Gretta S. Pallister+ Mr. and Mrs. Thomas G. Stauffer

\$25,000 - \$99,999

Anonymous Dr. Barbara Brown and Dr. Steven Ward Mr. and Mrs. David S. Dickenson II

\$10,000 - \$24,999

Anonymous Janis and Paul DiCorleto Sarah and Robert Gries Mrs. James F. Lincoln, Jr.+ Thomas and Ann Seabright Mr. and Mrs. Thomas G. Stafford K.K. and Joe Sullivan

\$5,000 - \$9,999

Anonymous **Richard and Susan Beck** Mr. and Mrs. Charles P. Bolton Mrs. Betty A. Farenchak Marion and Gene Faubel Mrs. Jean H. Fisher Mr. and Mrs. Robert R. Galloway Dr. Clement W. Hamilton and Karen A. Krager Mr. and Mrs. Henry R. Hatch Mr. and Mrs. Joseph J. Mahovlic Mr. Stephen and Mrs. Amanda Morris Mr. Donald W. Morrison Bill and Kathy O'Neill Mrs. Ella Quintrell+ Mr. Kenneth R. Roll Dr. and Mrs. Andrew P. Schachat Mrs. David Seidenfeld Mrs. Bruce H. Stewart Mrs. Charlotte Tarr Mr. and Mrs. Thomas V.H. Vail

Mrs. Joan Yocom \$2,500 - \$4,999

Ms. Pam Conover and Mr. Jon D. Adams Tom and Mary Anderson Mr. and Mrs. Richard H. Bole Jenny and Glenn Brown Mrs. Marlene S. Campbell Michelle Capdeville Mrs. Beth Cassella James Daus and Larissa Read William M. Donley Mr. Allen H. Ford Mr. and Mrs. Earl R. Franklin Mary Ganger Dr. Julia Grant and Mr. Earl Grant Mr. and Mrs. Charles Gustafson Mr. and Mrs. John E. Katzenmeyer Mr. Stephen J. Knerly, Jr. Mrs. Herbert McBride Mr. and Mrs. F. Stevens McConnell III Mr. and Mrs. Henry L. Meyer III Dr. and Mrs. J. Donald Moorhead Mrs. Lucia S. Nash+ Mr. and Mrs. Richard W. Parke Thomas+ and Marcia Rohweder Michael and Carol Sherwin Mrs. Barbara B. Webster+ Ms. Susan Wolpert

\$1,000 - \$2,499

Anonymous (4) Mr. Jeffrey Allenby Douglas W. Arthur Janis J. Baker Mr. and Mrs. Arthur D. Baldwin II Mr. and Mrs. William Barnes IV Mrs. Janet E. Bartels Ms Leslie M Bell Jack and Carolyn Blackwell Mr. Dick Blum and Ms. Harriet Warm Mr. and Mrs. Benjamin P. Bole III Ms. Jennifer Brainard Dr. Don Brinberg and Dr. Barbara Berkelev Mr.+ and Mrs. Richard H. Brooks Frank and Leslie Buck Mr. and Mrs. William R. Calfee Mr. and Mrs. Gerald K. Carlisle Mr. and Mrs. Andrew Coleman Sue and Peter Danford Mr. and Mrs. Randy DeMers Drs. Leslie and Mike Dingeldein Dr. and Mrs. Michael D. Eppig Mr. John Fatur Catherine and Bruce Ferguson Andrew and Judy Green Francis and Maureen Greicius Mary C. Groves Peter and Debra Guren Mr. Newman T. Halvorson Jr. Bob Heath and Beth Buchanan Bill and Nancy Hendricks Mr. and Mrs. John J. Hetzer Ted and Jane Hieronymus Betty Hollister+ Mr. and Mrs. J. Robert Horst Jeff and Sally Huntsberger Dr. and Mrs. Scott R. Inkley Mr. and Mrs. Leslie W. Jacobs

Mr. and Mrs. D. Allan Just Ms. Nora D. Kieser Ms. Alice Kruse Mr. and Mrs. Arthur J. Lafave, Jr. Mr. and Mrs. Joseph Lencewicz III John and Carol Lillich David and Janice Logsdon Mr. and Mrs. Michael B. Maynard Mrs. Ann H. McConnell Mr. and Mrs. S. S. McMillan IV Mr. Glenn A. Metzdorf Lynn and Mike Miller Warren and Betsi Morris Mr. Stephen and Mrs. Amanda Morris Dr. Marjorie M. Moyar and Mr. Bert W. Moyar Mr. Richard L. Nosse Mr. and Mrs. Ernest J. Novak, Jr. Maura O'Donnell-McCarthy and Neil McCarthy Mrs. Margaret Ocepek Mr. and Mrs. Stuart Otts Mrs. Nancy Patrick Haans Petruschke Miss Annette Poncar+ **Carol Powers** Doug and Corey Ralston Mr. Bruce T. Rankin John Rodewig Drs. Teresa and Edward Ruch Mrs. William J. Schlageter Mr. and Mrs. Alexander C. Scovil Marian and Michael Shaughnessy Alice S. Sherman Fredrick and Janet Shook

Mr. and Mrs. John E. Sulak Mr. and Mrs. Daniel C. Sussen Ms. Lorraine S. Szabo Stuart and Penny Theis Michael and Cindy Vehovec Mrs. Karla Ware Erb and Mr. L. William Erb Mr. and Mrs. Fred Watkins Mrs. Robert Y. White Mrs. Ann Whitney Mrs. Mareen Wolfe Mr. and Mrs. James Wymer

\$500 - \$999

Anonymous Mr. David W. Albrecht Mr. and Mrs. William G. Bares **Erva Barton** Cynthia Bassett Mr. and Mrs. John P. Bertsch Mrs. Robert M. Biggar Mr. and Mrs. Jeffrey M. Biggar Thomas and Bridget Borowske Dr. and Mrs. Akram Boutros Ms. Maureen A. Brennan and Mr Andrew Resetar Mr. and Mrs. Bradley Brown Pat and Bill Butler Mr. and Mrs. Peter A. Carfagna Mr. and Mrs. David J. Carpenter Mr. and Mrs. Ray Champa Dr. Cynthia Chapman and Dr. Wai Wah Sung Drs. Ignacio and Katya Chiong Mr. and Mrs. David Cobb Marilyn and Anthony Colnar Alfred R. Cowger Chet and Rickie Crone



Individual Giving

Marilyn and Dick Doerr Henry C. Doll Mr. and Mrs. Charles D. Dolph Eric Dunn and Jennifer Myers Mr. and Mrs. Jack Ellwanger Kenneth and Joan Frato Pam and Richard Goetsch Jeffrey Gold and Eric Taylor Ms. Nancy Gorenshek Jane and Jim Griswold Mrs. Judith F. Gruber Mr. and Mrs. Robert N. Gudbranson Mr. and Mrs. Robert C. Hall Gordon and Diane Hanford Mr. and Mrs. William Hatch Mr. and Mrs. John F. Herrick Mr. and Mrs. Chris Hill Dr. and Mrs. Robert L. Hinnes Ms. Donna Lee Pratt and Mr. Patrick J. Holland Joan R. Holmes Mr. and Mrs. Harry L. Holmes Dr. Marguerite B. Humphrey Dett and Robin Hunter Mr. Bruce Jarosz Priscilla A. Jones Mrs. Marcia E. Kampfe Mr. John Karas Pam and Steve Keefe Mrs. Erin Kennedy Ryan and Mr. Brent Ryan Dr. and Mrs. Sam E. Kinney Mr. and Mrs. John J. Lane, Jr. Roger and Jennifer Langston Mr. William B. LaPlace Ms. Mary Ann Lasch Mr. and Mrs. David Lehmer Charlotte A. Lehto Tom and Kathy Leiden Mr. and Mrs. Jon A. Lindseth Mary and Barry Livingston Gertrude Losely Mr. and Mrs. Charles L. Maimbourg Mr. and Mrs. Charles S. Marston Jon and Katie Martin Margaret B. Marting Mr. and Mrs. James A. McClurg Mr. and Mrs. John R. Miller Mr. and Mrs. Robert B. Murch Mrs. Judith C. Murch* Mr. and Mrs. Latham W. Murfey III Molly Dixon and Jerry Murphy Ray and Katie Murphy Kevin and Lois Myeroff Ms. Laura M. Obloy Mrs. Patricia C. Oppmann Mr. and Mrs. William A. Pappas

Mr. and Mrs. William C. Patterson James and Barbara Pelowski, Ph.D. Mr. and Mrs. Graham Peters Mr. and Mrs. Spencer Pisczak Dr. and Mrs. S. S. Rasiwala James S. Reid, Jr. Mike and Gloria Reljanovic Mr. and Mrs. John P. Richardson Natalie A. and Christopher S. Ronayne Dr. Melvin S. Rosenthal and Dr. Miriam Rosenthal Mrs. Don L. Rubinfield Dr. Lori Rusterholtz, Ms. Beverly Gooding and Ms. Linda Schmidt Mrs. Florence B. Rutter Dr. Patricia Sargent Dr. and Mrs. Irwin A. Schafer Mrs. Susanne F. Schroer Dr. Sally R. Schulze and Mr. John B. Schulze Ms. Kim Sherwin John and Cassi Sinnenberg Ralph Slaw Mr. Roy Smith Mr. and Mrs. William E. Spatz Mrs. Mary Sposito Charles and Jean Stephenson Ms. Katherine Stokes-Shafer. APLD and Mr. Donald M. Shafer Drs. John and Eileen Stork Mr. and Mrs. Michael J. Tabor Mr. and Mrs. Kenneth E. Tavlor Mr. and Mrs. Karl S. Theil Mrs. Martha P. Thompson Ms. Bethany Tinlin and Mr. Justin Locsei Mrs. Joanna S. Van Oosterhout Esben Vogelius and Kristin Ricci Gustav Waffen and Linda Woznuk William and Betsy Wagenlander Mr. and Mrs. Stephen D. Walters Mr. and Mrs. Russell J. Warren Mrs. Kristi E. Webster Ms. and Ms. Elie Weiss Dr. and Mrs. William Welches Mrs. Helen Whitehouse Ted and Sandy Wiese Dr. and Mrs. John H. Wilber Mr. and Mrs. Alan D. Wright Pamela Zarlingo \$250 - \$499

Anonymous (5) Mr. and Mrs. Charles Abbey Mr. and Mrs. David Abood Ian Adams



Charles and Cassandra Aiken Mr. and Mrs. Richard B. Ainsworth, Jr. M. Stacey Alatis Mr. and Mrs. Alfred B. Anderson Ms. Cindi M. Arroyo and Mr. Sam R. Bradley Timothy and Christine Ash Robert and Ingrid Bahler Andrew and Elizabeth Balazs John Barber Ms. Elaine Barnard Mary and Kevin Barnes Dr. and Mrs. Benico Barzilai Mr. and Mrs. Ramon V. Battles Mr. and Mrs. John G. Bauer Doug and Lynne Bekkedahl Ann Bergen Drs. John and Wilma Bergfeld Rose V. Blair Mr. and Ms. Richard J. Bogomolny Mrs. Susan H. Bole Mr. and Mrs. James Bonander Mr. and Mrs. Robert H. Bradt Mr. Grover Bralley and Ms. Barbara Bralley James and Mary Bright Mr. and Mrs. Richard D. Brockett Tom and Colleen Browne Christine Burke Mr. and Mrs. Duke Busa J. Philip Calabrese and

Mary R. Bynum Ms. Donna Campbell Mr. and Mrs. Michael F. Caputo Mr. and Mrs. Lawrence J. Carlini Mr. and Mrs. Ian Carlstrom Mr. and Mrs. John J. Carney Frank and Margaret Carpenter Mr. and Mrs. Roger H. Cerne Mr. and Mrs. Louis J. Cerny, Jr. Mr. and Mrs. Louis Chaiten Mr. and Mrs. Lee A. Chilcote Maureen and Thomas Christy Mr. and Mrs. Thomas A. Cicarella Elizabeth F. Clark Dr. Julie Clayman Julia Heng and Duane Clemens Kevin and Beth Clinton Tony and Karen Colini Rudy and Mary Conrad Mr. and Mrs. Thomas J. Cook Mr. and Mrs. Fred B. Cooper Linda M. Costello Dr. and Mrs. Dale H. Cowan Mr. and Mrs. Warren Cox Ms. Carol A. Crowe Dr. Beverly B. Dahms, M.D. Margit K. Daley Mr. and Mrs. David G. Davies Allen Denzine and Denella Sing Krishna Devulapalli Mr. and Mrs. Giovanni Dicenso Nancy J. Dilgren

Mr. and Mrs. Joseph Doles Elizabeth Dreben and Hillel Chiel Dominick Durante and Linda Kuhn David J. Eichenmiller and Alison W. Gee Brent English and Karen Skunta Dr. and Mrs. Caldwell B. Esselstyn, Jr. Mr. and Mrs. Chandler H. Everett Doreen Faidiga and Terrie Doboze Mr. and Mrs. Dennis R. Farmer Dr. Carol F. Farver and Dr. Robert D. Needlman Frank and Mary Ellen Fecser Betty A. Farenchak Mr. and Mrs. Rob Fellinger Mr. Robert S. Finkelhor Marlene and Larry Fischer Mr. and Mrs. George Fornadley Mr. and Mrs. John H. Franklin Jr. Mr. and Mrs. Greg Frost Mr. and Mrs. Frederick A. Fruscella Ms. Sydney Frymire Mr. and Mrs. Robert W. Gelbach Mr. and Mrs. Gregory Goss Mr. James D. Graham and Mr. David M. Dusek Jennifer Grambo and Craig Hupp Linda A. Grandstaff Ellen and Erik Gregorie Scott and Kristin Gregory

Mr. and Mrs. David Griesinger Mr. and Mrs. Charles Grossman Janet and Douglas Grout Michael and Kimberly Guenther Dr. Lauren Guren and Mr. Zachary Guren Malou Gustavsson-Monago and Fred Monago Mrs. John A. Hadden Mr. and Mrs. Todd A. Haefling Nancy Halkerston Burcham Ray and Dale Halliwill

Mr. and Ms. James Hallman Mr. and Mrs. James Hallman Mr. and Mrs. James R. Halloran Ms. Susan Hanna Dr. and Mrs. Jon A. Hardacre Martha S. Harding Mr. and Mrs. Thomas F. Harvey Mr. and Mrs. William S. Hawgood II John A. Hellman Mr. and Mrs. Oliver C. Henkel, Jr. Mr. and Mrs. William M. Henning Mr. and Mrs. William Hertel Mr. and Mrs. Ben Himes Mr. and Mrs. Ted J. Hlavaty Mr. Edward G. Hodina Mr. Michael T. Cook Mr. and Mrs. Ed Hohertz Dr. Richard and Linda Holzheimer Mr. and Ms. Thomas Kovach Christopher and Christine Horsburgh Mr. and Mrs. Neal Huntington Mac and Beth Jenkins Amrita John and Shine Kochukunju Raju Nancy Junglas Dr. and Mrs. Michael W. Keith Dr. Samuel Kerns Mr. and Mrs. Grant T. Kloppman Mr. and Mrs. Edwin G. Koethe Mr. and Mrs. Stephen J. Kolek, Jr. Mr. and Mrs. Joseph F. Koonce Mr. and Mrs. Joseph Kovalcheck, Jr. Diana L. Kunze Dr. Ning-Tsu Kuo and Dr. Ronald Przybylski Mrs. Mary Jo P. Lackamp Mrs. Christine Lakus Ms. Jennifer A. Lambein Mr. and Mrs. Ken Lashutka Mr. James M. Lawniczak Ms. Elizabeth E. Lehtola Robert and Valerie Leib Mr. and Mrs. Jason Leidich Dr. Edith Lerner Mr. and Mrs. Morton Levin Dr. and Mrs. Stephen B. Levine

Mr. and Mrs. Tim Litts Kenneth and Anne Love Dr. and Mrs. James L. Lowder Mr. and Mrs. Anthony J. Lucci Dr. and Mrs. J. Donald Lucker Reverend Richard H. Lutz Ms. Elizabeth R. Macgowan and Mr. Robert Friedman Betsy and Stephan Mahlke Mr. and Mrs. Christopher M. Mahovlic Mrs. Leslie Manzo Missy Marshall Merilee Marshall Ms. Carol A. Marshall Francis and Erica Martin Joseph and Susan Mastromonaco Charles Mathes and Arlene Graston Ms. Patricia Maznik and Mrs. Michelle Davey Charlene A. McCarthy Mr. and Mrs. Craig McDowell Ms. Marti McHugh-Curtis and Mr. Keith Curtis Jack McMillan Mr. and Mrs. Richard G. Mecaskey Lola Yanic Meek Dr. and Mrs. Geoffrey Mendelsohn The Merkel Family Mr. and Mrs. John Michalak Mr. Gerard and Mrs. Georgette Mikus

Mr. and Mrs. William J. Miller II Mr. Osborne Mills, Jr. and Ms. Loren E. Bendall Mr. and Mrs. Roy D. Minoff Mr. and Mrs. David R. Mitchell Lisa A. Mitchell Mr. and Mrs. Lawrence S. Mlynek Ms. Theodora M. Monegan Ms. Kathryn Mook Ms. Jane Ross Moore Mr. and Mrs. Kenneth J. Morgan Mrs. Hikari Morikawa Mrs. Nancy Mueller and Dr. Howard Cash Mr. and Mrs. Brian F. Murphy Mr. and Ms. Joseph Murphy Mr. and Mrs. Richard L. Musel Mr. and Mrs. Marvin W. Nevans Sally Neville+ Mr. and Mrs. Bill Nevison Mr. and Mrs. John M. Newman, Jr. Glenn and Christy Nicholls Mr. and Mrs. David O'Halloran Timothy P. and Mariann Offtermatt W. James and Susan Ollinger Lisa and Michael Orlandi Steve and Lea Osgood Michael and Marcella Owens Mr. and Mrs. Andrew Paine Ms. Ferole L. Parmelee Mr. and Mrs. Ronald R. Peura **Ronald Pierre** Kermit and Joyce Pike



Mrs. David H. Hoag

Individual Giving



John Pinkowski and Amy Weidman Mrs. Gerri Pitrone Bill Podojil and Joe Schlesinger Mr. and Mrs. Donald Pokorny John and Marybeth Primeau **Richard and Linda Profant** Michael and Susan Prokop Ms. Marie Burr and Mr. John Quackenbush Lute A. Quintrell and Lynn R. Quintrell Mrs. Alfred M. Rankin Mr. and Mrs. Phillip A. Ranney Mr. Jeff Rassie John and Joanne Rath Mr. and Mrs. Charles N. Richards Dr. and Mrs. Bradford J. Richmond Dr. Shere Agaiby and Dr. Maged Rizk Mr. and Mrs. Donald Roberts William H. Roberts Reinhold and Ginny Roedig Mr. and Mrs. Harold A. Ross Mrs. Barbara Rosskamm Mr. and Mrs. Robert Rozic Katharine and Robert Ruhl

Lorraine and Richard Rzepka John and Delores Saada Martin Saltzman Mr. and Mrs. Louis A. Salza Mr. and Mrs. Robert A. Santoro Mr. Scott Savage and

Ms. Denise Ruthenberg Doug and Lisa Schattinger Mr. and Mrs. William G. Scheele Charles and Susan Schenkelberg Mr. and Mrs. William E. Schlag Ms. Patricia Schraff and Mr. Jerome Micco

Ms. Susan J. Seman-McDaniel and Mr. Michael W. McDaniel Dr. and Mrs. Michael Sheahan Mr. and Mrs. Gary Shoemaker Mr. and Mrs. Robert F. Sieck Linda Skok and Gretchen Skok DiSanto Mr. and Mrs. Hugh Slater Ed & Yvette Slusarski Mr. and Mrs. Judson E. Smith Dave and Karen Smith Drs. Dennis and Ethelee Smith Mr. and Mrs. Richey Smith

Ms. Patricia Snyder and Mr. Michael Frank Mr. and Mrs. James Spallino, Jr. Jack and Claudia Speakman Mr. Arthur Spector Steve and Janice Stanisa Mr. and Mrs. William W.T. Stephans Dr. and Mrs. Jason Stern Ms. Kathryn O'Connell and Mr. Mark Gervelis Mr. Steven G. Streitel Mr. and Mrs. E. R. Suttell Brian Syktich and Deb Landrseo Mr. and Mrs. William W. Taft Mr. and Mrs. Courtenay O. Taplin Barbara and Frank Tercek Mr. and Mrs. Joseph H. Thomas Jeff and Margaret Thresher Mr. and Mrs. Perry Tonni Mr. David Trevarthen Dr. Joan E. Trey and Dr. Daniel J. Brustein Ms. Tara Turner Mr. and Mrs. Mark A. Tyler Donald Valentine and Caroline Kovac

Dr. and Mrs. Robert H. Vaughn Ms. Kathy Presciano and Mr. Paul Vincent Linda and Les Vinney Carolyn and Raymond Voelker Robert Wagner and Mary Gavin Wagner Mr. and Mrs. John P. Walton Mr. and Mrs. John T. Webster Drs. Miriam and Daniel Weiss Mr. and Mrs. Frederick L. Wenham III Mr. and Mrs. Barry Wheeler Mr. and Mrs. Richard P. White Peter and Cathy Whitehouse Fred and Marilyn Wilder Mr. and Mrs. Steven Woods Drs. Woznicki and Lamping Bill and Ruth Wulfhoop Mr. and Mrs. Peter C. Wykoff John and Lori Yanosich Sharon Yarnell and John Liston James and Kathleen Young Mr. and Mrs. Donald A. Zito Donna Marie Znidarsic



Holden Forests & Gardens Financial Report

	OPERATING RESULTS				
	2017		2016		
SUPPORT & REVENUE	\$	%	\$	%	
Contributions	4,473,216	32%	3,721,391	28%	
Government Grants	520,951	4%	525,216	4%	
Holden Arboretum Trust	4,171,125		4,536,192		
Special Events (Net)	173,629	1%	260,038	2%	
Admissions, Courses, Parking, Store and Other	3,246,684	23%	3,305,206	25%	
Endowment Income Available for Operations	1,314,000	9%	705,640	5%	
Operating Investment Income	199,204	1% 205,218		2%	
Total Support & Revenue	14,098,809	100%	13,258,901	100%	
EXPENSES					
Comp., Benefits & Staff Development	7,442,169	48%	7,422,706	49%	
Maintenance	974,993	6%	1,095,596	7%	
Professional Services	1,732,895	11%	1,014,240	7%	
Advertising	159,198	1%	192,863	1%	
Utilities, Insurance & Real Estate Taxes	924,082	6%	1,039,871	7%	
Education, Research, & Membership	1,242,197	8%	1,237,567	8%	
Supplies & Postage	148,805	1%	149,631	1%	
Depreciation	2,486,687	16%	2,379,047	16%	
Technology	27,702	0%	30,752	0%	
Projects & Other	459,642	3%	601,684	4%	
Interest	_	0%	1,822	0%	
Total Expenses	15,598,370	100%	15,165,779	100%	
Increase/(Decrease) in Net Assets from Operations	(1,499,561)		(1,906,878)		
PROGRAMEXPENSES					
Horticulture and Conservation	4,234,840	27%	4,179,754	28%	
Research	1,635,897	10%	1,519,814	10%	
Education	2,451,280	16%	2,392,052	16%	
Guest Relations	3,592,231	23%	3,425,185	23%	
Facilities, Management and Administrative Overhead	2,364,326	15%	2,493,807	16%	
Development	1,319,796	8%	1,155,167	8%	
	15,598,370	100%	15,165,779	100%	

Data in this reporting format includes the Unrestricted General Fund and the Temporarily Restricted Fund.

Holden Forests & Gardens Board of Directors*

Bradley E. Turner, Chairman Robert R. Galloway, Secretary Constance N. Abbey Paul R. Abbey Thomas D. Anderson Victoria U. Broer Barbara Brown, Ph.D. Andrew Coleman William E. Conway Jonathan E. Dick Paul E. DiCorleto Sarah L. Gries Debra H. Guren Peter S. Hellman Joseph P. Keithley Verne D. Klunzinger Stephen J. Knerly, Jr. Joseph J. Mahovlic Michael C. Marino Cynthia Moore-Hardy Ellen W. Jones Nordell Deidrea L. Otts Jane Q. Outcalt Gary W. Poth Erin Kennedy Ryan Robin D. Schachat Lynn C. Shiverick Ruth M. Stafford K.K. Sullivan Charles F. Walton

*As of July 31, 2018



Thank You to Our Volunteers!

Tim Ahlborn Don Allen Yolanda Anderson Hank Andrews Georgia Anetzberger **Dianne Archer** Susan Ash-Sanford Donna Atwell Jennifer Ault **Bob** Austin Virginia Backus Ariel Bacon Leslie Baeuerlen Brian Baird Janis Baker Mariella Banez Lynn Bango Joan Bania Anthony Barabani Tom Bartlo **Elaine Bayless Richard Beck** Susan Beck **Rvlee Beltran** Margaret Benic Pamela Benko Patrick Biliter Jack Blackwell Roger Blatnick Joan Braun Mary Brennan Debbie Breslaw McKenzie Brizes Jane Brockway George Brown **Rich Burand** Marge Burnett Deb Calvin Dorrie Carroll Sue Chalfin Kristy Chambers Alice Chessar **Rodrick Chima** John Christie Ann Clark Maesyn Clarno Sandra Cobb Lenore Cohn Sharon Collins Judy Conrad Edith Conzett Fred Cooper Tracy Corso Alfred Cowger Kwanita Cox David Cryor **Beverly Dahms** Deangelo Davis

Mary Jo Deucher Mary Kay Dolesh Maxine Donlon William Donlon Dick Douglas Vicki Douglas Linda Drake Wallene Ducmanas Kathleen Dugan J.B. Dunn Namita Durve Suzanne Earle Katherine Elder Carol Farroni Darlene Farry Dona Fatibeno Singerman **Rose Ann Forster** Sally Frantz Debra Freeman Patti Gabb Andrew Gerace David Gildersleeve Dave Gilson Meena Gokhale Amy Goletz Deborah Golias Melda Graves Scott Grisso Ardeth Gunton Elina Gurney Qaisra Haider Dale Halliwill Ray Halliwill Hollis Hamilton Albert Hanes Susan Hanna Sally Hanrahan Carol Harmon Debbie Haswell **Kristie Hawley** Grace Hayes Xiaojie (Dora) He Constance Herron Lillian Houser Hap Howle Jim Hunt Mary Hurley Gale Jacobsohn Gloria Jacobson Susan Johnson Linda Justice Donna Kautz Jan Kearney Jeff Keith Pat Keith Richard Kennelly Donald Killeen

Mary Ellen Klein Jeanne Knudtsen Joseph Koonce Frank G. Koss Enid Kraus **Christine Lakus** Robert Leib Robert Lemmo Steve Levitan Bonnie Lias Susan Lombardo Linda Lozzi Barbara May Marcia Mayer Laurel Mazorow David McGrath Sister Pat McHale Ramesh Mehta Philip Mellon Jeanette Metcalf Larry Miller Sally Miller Barbara Milter Aubrev Mixon Michael Mizen Yvonne Morbitzer Kenron Morgan David Morrow Donna Nass Geoff Navagh Maria Navas Barbara Nebe Mary Ann Negenborn Clement Nesnadny Donna Nicastro Don Nikolai Bob Noland Glenn Novotny Cindy Oakley Patricia O'Connor Dan O'Donnell Colette Ondrake Greg Ondrake Karen Opalka **Fred Orenics** Rebecca Pachlhofer Carol Pae Nancy Pae Ferole Parmelee Allison Patrick Jeanne Pearl Stuart Pearl Paulette Peluso Donna Petersen Annette Pizzino Nancy Polk Carol Powers Francis Raishart

Doug Ralston Tod Redding Andrew Reville Helen Rhvnard Anthony Robb **Ginny Roedig** Rachel Rouwenhorst Nancy Roy Denise Ruthenberg Mary Jane Ruttinger Lorri Rzepka Mary Salomon Ryan Samko Tom Sampliner Sue Sande Sherry Schmidt **Betty Schmiermund Bob Schmiermund** Franz Schubert Sherry Schubert Brenda Schultz Matias Schwartzman Pollv Sems Barbara Shamberger Lynn Shiverick Devorah Silverman Beth Simon Howard Simon Judi Slack Renee Slembarski Meghan Slusarski Yvette Slusarski Caitlin Smith Debbie Smith Joyce Smith Lia Smith David W. Snyder Mary Kay Snyder Helena Souffrant Jan Spalding Sarah Speroff Tom Springer Mary-Ann Stanky Maria Stannek **Eva Stephans** Marianne Stern **Robert Stern** Sue Stromberg Zita Stungys **Ronald Sulik** Daysha Sullivan Melissa Sullivan Gary Swinehart Susan Swisher Judy Szabo Ellen Timms Gregory Tomaro

Marilyn Raishart

Louise Toutant Joan Trey **Cindy Tucker** Brad Turner Peter Usavto Christine Van Dusen Danielle Veon **Bob Wagner** Mary Ann Wagner **Betty Wallis** Kay Wellman Marilyn White David Whittaker Matalie Whittaker Lori Whittington Linda Wiest Vanessa Willard Leroy Wilson, Jr Kate Witosky Elaine Wolan Christina Woodson Annette Yamada Valdone Ziedonis

Department	Hours	Hours Value	Visits	Individual Volunteer Count
Arboretum Education & Community Engagement Tour Guides, School Guides, Library, Tree Tale Tellers, Garden Partners, Habitat Hut	3,408	\$79,508.64	1,243	102
Arboretum Guest Services & Special Events Visitor Center Receptionists, Special Events, Canopy Walk & Tower Interpreters	4,782.05	\$111,565.23	1,323	380
Arboretum Horticulture & Conservation Gardeners, Bluebird & Purple Martin Project, Goose Management, Land Stewardship, Plant Records, Phenology, Arbor Care	4,258	\$99,339.14	1,748	171
Arboretum Lantern Court Private Event Assistants, Jelly Makers	208.25	\$4,858.47	67	15
Arboretum Police Department Trail Monitors & Deer Management	208.25	\$4,858.47	89	13
Botanical Garden Education & Community Engagement School Guides, Hershey Children's Garden, Public Programs, Library, Green Corps, Therapeutic Horticulture, Garden Naturalist, Glasshouse Interpreters, Events	7,118.95	\$166,085.10	1,474	586
Botanical Garden Guest Services & Special Events Glow, Big Spring, Nature Connects, Retail Assistants, Group Tour Guides, Visitor Services Representatives, Gourmets in the Garden, Hoppy Hour, Special Events	5,056.45	\$117,966.98	1,381	364
Botanical Garden Horticulture Gardeners, Glasshouse Horticulture, Animal Care, Plant Documentation	2,512.25	\$58,610.79	796	46
Administration Office Support, Volunteer Orientations, Training, Capacity Building	930.25	\$21,702.73	348	126
Advancement Office Support, Donor & Member Events, Benefit Event, Membership Services	1,556	\$36,301.48	457	82
Governance Board of Trustees	447	\$10,428.51	180	30
Marketing & Communications Photography, Green Team Outreach	287.25	\$6,701.54	95	59
Research Lab Assistant, Vacant to Vibrant	1,082	\$25,243.06	307	14
GrandTotal	31,854.7	\$74,3170.14*	9,508	1,392

*Based on Independent Sector Index of Volunteer Time at \$23.33 per hour in 2017



Our Mission: Advance and inspire a deeper understanding of plants to enhance life.

Our Vision: Vibrant green communities and diverse native forests of the Great Lakes region will flourish and sustain life.

CLEVELAND BOTANICAL GARDEN 11030 EAST BLVD, CLEVELAND, OHIO 44106 216.721.1600 CBGARDEN.ORG

THE HOLDEN ARBORETUM 9500 SPERRY RD, KIRTLAND, OHIO 44094 440.946.4400 HOLDENARB.ORG

© 2018 "Holden Forests & Gardens" and the related logo is a trademark owned by The Holden Arboretum. "Holden Forests & Gardens" is a collaboration between affiliates, The Holden Arboretum and the Cleveland Botanical Garden, Ohio nonprofit corporations.